UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/846,645	05/01/2001	Tom Milner	10004560-1	4840

7590 09/22/2005

HEWLETT-PACKARD COMPANY
Intellectual Property Administration
P.O. Box 272400
Fort Collins, CO 80527-2400

EXAMINER	
SCHNEIDER, JOSHUA D	

ART UNIT	PAPER NUMBER
2182	

DATE MAILED: 09/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/846,645	MILNER ET AL.	
	Examiner	Art Unit	
	Joshua D. Schneider	2182	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *06 July 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *14-36* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *14-36* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 7/6/2005 have been fully considered but they are not persuasive.

2. With regards to claims 21, 26, and 31, and the rejection under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement, Applicants argue that the description of a software element's function (i.e., identifying the type of device) is considered adequate for enablement under M.P.E.P. § 2106.01, because one of ordinary skill in the art is capable of writing code to fulfill that function. However, this software elements function that is found to be lacking. The rejection clearly set forth that there is no teaching that code retrieved from the device for identifying the type of device is executable code. A teaching of such a limitation is not found on pages 7 or 8. It is still not found anywhere in the specification where the code *retrieved from the device* for identifying the type of device is executable code. In the specification code being executed is located on the server, or host, but never on the device from which the identification code is retrieved. The arguments with regards to the rejection under 35 U.S.C. 112, first paragraph, are therefore not persuasive.

3. With regards to claims 22 and 30, and the rejection under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement, Applicant states that a system object ID (or SysObjID) is explicitly referred to at page 6 (2nd paragraph). The only acronym found in the second paragraph of page 6 of the originally filed specification is JBODs. Applicant has shown no basis for this argument, and the acronym SysObjID is still not found anywhere is the specification.

4. With regards to claims 14, 15, and 17, and the rejection under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6,122,639 to Babu et al., Applicant's argument is not persuasive. Applicant has argued that the device type is determined before the lookup of the device type identifier in a device type table. This is not true. A good analogy of what is going on in Babu is the lookup of a bar code by a cash register in a grocery store. After reading the identification, a bar code, information on a box, the computer in the cash register does not know what is in the box. Rather it takes this identification, and compares it against a table or database of known identifications. Only after is has found a matching identification does the register discover that the box contains corn flakes, and its other associated information, such as price, size, and discounts that apply. Likewise, the host unit in this case does not know the device type when the device type identifier is retrieved, but rather has gained the information necessary to identify the device. If Applicant was to give an examiner a customer number, but this number is only used to get the information that defines the customer. This is very clearly the way virtually all identifiers are used, whether it be a employee ID number or a social security number, it only leads to the information that is necessary to truly identify the person. The arguments are therefore found to be unpersuasive.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. Claims 21-36 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in

the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

7. With regards to claims 21, 26, and 31, it is not found anywhere in the specification where the code retrieved from the device for identifying the type of device is executable code. The specification describes the property files (pages 8-11) that identify the devices only as data files and never makes reference to them containing executable code portions.

8. With regards to claims 22 and 30, the specification never refers to a SysObjID. Applicant claims using a system object identifier in claim 30. This is defined by the reference applied in earlier rejections but not in the Applicants specification. It would also appear that the applicant is using conflicting limitations.

9. Claims 23-25, 27-30, and 32-36 are rejected for including the non-enabled subject matter of the claims from which they depend.

10. No art rejections to claims 21-36 are made because the specification does not provide adequate description of the invention to enable the examiner to interpret the claims based on specification in light of the 35 USC 112 rejections without requiring the examiner to make a great deal of speculative assumptions. See MPEP 2173.06 wherein it is stated:

> "... where there is a great deal of confusion and uncertainty as to the proper interpretation of the limitations of a claim, it would not be proper to reject such a claim on the basis of prior art. As stated in In re Steele , 305 F.2d 859, 134 USPQ 292 (CCPA 1962), a rejection under 35 U.S.C. 103 should not be based on considerable speculation about the meaning of terms employed in a claim or assumptions that must be made as to the scope of the claims."

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are

> such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

12. Claims 14, 15, and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6,122,639 to Babu et al.

13. With regards to claim 14, Babu teaches retrieving a plurality of property files from a predefined subdirectory; wherein each property file of said plurality of property files describes a type of device (Fig. 3, elements 302-314, column 2, line 64, through column 3, line 10, and column 3, lines 45-47). Babu teaches determining whether a device associated with said I/O path is the type of device described by the property file associated with said object method (column 2, line 64, through column 3, line 10). Babu teaches a plurality of methods may be used to identify the device, such as new device identification (Fig. 3) or device update detection (Fig. 4A). Removing a class identifier from each property file of said property files, wherein each class identifier identifies a class; creating object of the respective class of each class identifier; and calling a specific method from a plurality of methods for each created object would have been obvious to one of ordinary skill in the art at the time of invention, as object oriented programming was well known in the art in order to increase portability and competitiveness in the computer marketplace though the use of leading edge technology.

14. With regards to claim 15, Babu teaches adding a new storage device to said storage area network (column 1, lines 44-55), wherein said new storage device is caused to be associated with said I/O path, and wherein said new storage device is a new type of device to said storage area network, and storing a new property file in said predefined subdirectory describing said new type of device (column 2, line 64, through column 3, lines 67). The restarting code of a management

server to thereby cause repetition of steps utilizing said new property file, is inherent to the continued running of the process to track and update device information (column 4, lines 51-64).

15. With regards to claim 17, Babu teaches a default property file of said plurality of property files identifies a simple network management protocol (SNMP) class, wherein said default SNMP class defines a method to identify devices by a comparing a SNMP system object identifier to at least one field in said default property file (Fig. 5, column 8, lines 7-24, and column 2, line 65, through column 3, line 54).

16. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6,122,639 to Babu et al. in further view of U.S. Patent Application Publication No. US 2002/0161852 to Allen et al.

17. With regards to claim 16, Babu fails to explicitly teach the use of SCSI identifiers. Allen teaches that SCSI devices are well known in the art, and a default property file of said plurality of property files identifies a default small computer system interface (SCSI) class, wherein said default SCSI class defines a method to identify devices by comparing SCSI vendor identifier and product identifier information to at least one field in said default property file (page 4, paragraph 30). It would have been obvious to one of ordinary skill in the art at the time of invention to combine the SCSI identifiers of Allen with the Device defining of Babu in order to accommodate new device types according to an agreed upon protocol.

18. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6,122,639 to Babu et al. in further view of U.S. Patent Application Publication No. US 2002/0161852 to Allen et al.

19. With regards to claim 18, the AAPA teaches a storage area network (SAN) comprising: a plurality of servers, wherein said servers are communicatively coupled to a fabric of said SAN (page 2, lines 12-24); Babu teaches host agent processes, wherein each of said host agent processes executes on a respective server of said plurality of servers, and wherein said host agent processes are operable to query devices associated with host logical unit numbers I/O paths of said SAN to gather device information (column 2, line 65, through column 3, line 54), a management server, wherein said management server employs a simple network management protocol (SNMP) manager process to query devices associated with SNMP I/O paths of said SAN to gather device information (column 3, lines 46-54), a plurality of property files stored in a predefined directory, wherein each property file of said plurality of property files describes a type of device, and wherein each property file of said plurality of property files includes an identifier of code operable to determine whether a device associated with an I/O path is the type of device described by its associated property file (column 2, line 65, through column 3, line 10), and, a management server process, wherein said management server process is operable to receive gathered device information from said plurality of host agent processes and from said SNMP manager process; and wherein said management server process is operable to call code identified by property files with gathered device information as arguments to thereby identify types of devices associated with I/O paths of said SAN (column 3, lines 46-67). Babu teaches uniquely identifying each device (column 14, line 62, through column 15, line 6). It would have been obvious to one of ordinary skill in the art at the time of invention to combine the plurality of servers of the AAPA with the device detection of Babu et al. in order for a network to be able to easily accommodate new device types in a network in which a change has occurred

20. Claims 19 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6,122,639 to Babu et al. and the applicant admitted prior art (AAPA) in further view of U.S. Patent Application Publication No. US 2002/0161852 to Allen et al.

21. With regards to claim 19, Babu teaches creating an array of identifiers including each said identifier from each property file (Fig. 5, column 8, lines 7-24, and column 2, line 65, through column 3, line 54). Allen teaches a plurality of small computer system interface (SCSI) device discovery objects utilizing identifiers from said array that identify SCSI device classes (page 4, paragraph 30), and Babu teaches a plurality of SNMP device discovery objects utilizing identifiers from said array that identify SNMP device classes. It would have been obvious to one of ordinary skill in the art at the time of invention to combine the SCSI identifiers of Allen with the Device defining of Babu in order to accommodate new device types according to an agreed upon protocol. Code instantiating objects from an array of identifiers would have been obvious to one of ordinary skill in the art at the time of invention, as object oriented programming was well known in the art.

22. With regards to claim 20, Babu fails to explicitly teach the use of SCSI identifiers. Allen teaches SCSI device discovery object for each host logical unit numbers I/O path (page 4, paragraph 30); and Babu teaches SNMP device discovery object for each SNMP I/O path (column 3, lines 46-50). It would have been obvious to one of ordinary skill in the art at the time of invention to combine the SCSI identifiers of Allen with the Device defining of Babu in order to accommodate new device types according to an agreed upon protocol. Code calling a method of each instantiated object would have been obvious to one of ordinary skill in the art at the time of invention, as object oriented programming was well known in the art.

Conclusion

23. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joshua D. Schneider whose telephone number is (571) 272-4158. The examiner can normally be reached on M-F, 8-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dov Popovici can be reached on (571) 272-4083. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JDS

KIM HUYNH
PRIMARY EXAMINER

9/16/05